

ENERGY

COMICS

No.1

\$1.25



Dangers & Opportunities of Energy Choices

© 80
Kitchen

introduction

Much of the debate over energy strategy has been between opposing visions of the future.

Those who seek to increase energy production have been sustained by the dream of ever-growing wealth and power, and of the freedom of choice that being wealthy and powerful brings. They have argued that only by increasing energy use can the economy expand and give opportunities to the poor.

Those who oppose big energy projects have often been guided by a dream of harmony with nature, and of the freedom from outside authorities that local self-reliance allows.

The big energy promoters have accused those who **oppose** their projects of attempting to **impose** unpopular dreams on the nation. Who is imposing on whom?

The costs of increasing our energy supplies are paid by all of us, whether or not we share in the great wealth and power they make possible. We pay with our taxes, our utility bills, and with our health. We pay in decreasing security as military tensions arise over foreign oil. Our security decreases again when nuclear power plants and liquefied natural gas facilities are built carrying the potential of catastrophic accidents. We may yet pay a great cost if burning fossil fuels alters world climate.

The energy controversy is more than a battle between those who desire wealth and those who glorify frugality, however. It is a battle between strategies which enrich the few at the expense of the many, and strategies which could create even more wealth but would spread it more equally. What is being contested is the ownership and control of energy.

Energy Comics is an attempt to help alert people to the feasibility of decentralizing energy production now and to the dangers of over-centralized energy projects.

Besides its didactic purpose, **Energy Comics** is also dedicated to the ideal that comic books be fun and entertaining.

This comic book will hopefully be reprinted. I welcome criticism and counterargument to refine the quality of its information and increase its usefulness as an organizing tool.

Also please send clippings, information, and suggestions for stories in future issues.

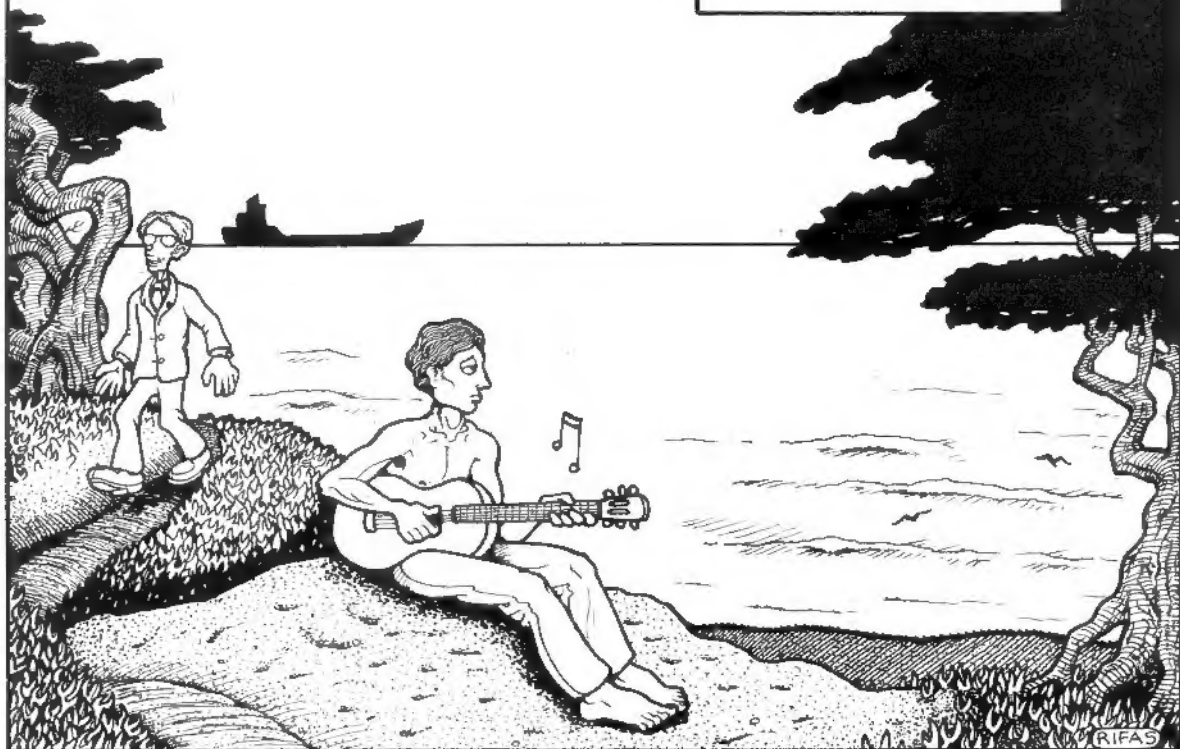
The stories in this comic book are protected by copyright in the names of the artists. I encourage you to contact them for the right to reprint their stories. You can write to them in care of Educomics. No special permission is needed for brief excerpts used to illustrate a review. If you do this, though, please note by each illustration that the work is copyrighted. Also please mention that a single copy of **Energy Comics** costs \$1.50 postpaid from Educomics, box 40246, San Francisco, California, 94140, USA.

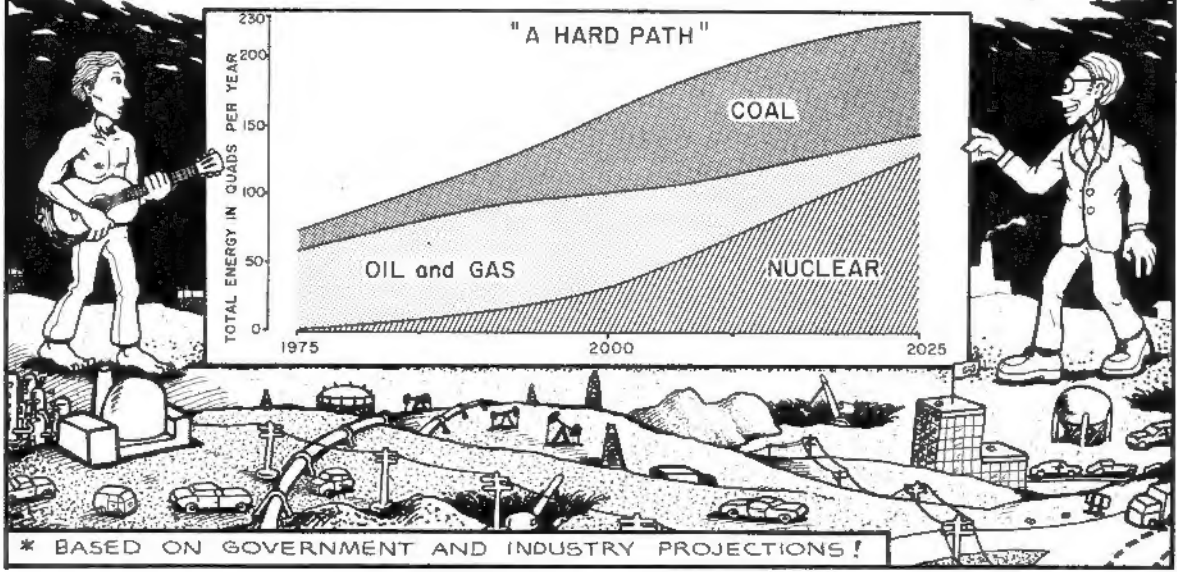
Leonard Rifas
editor/publisher

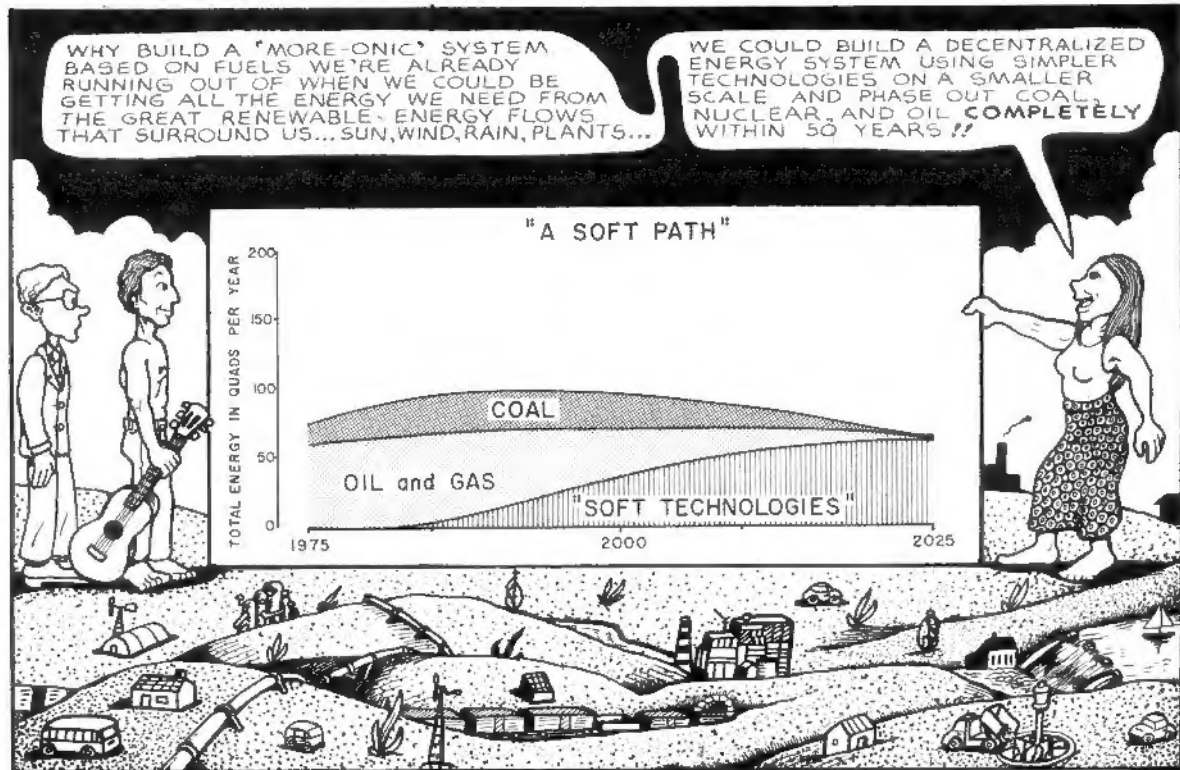
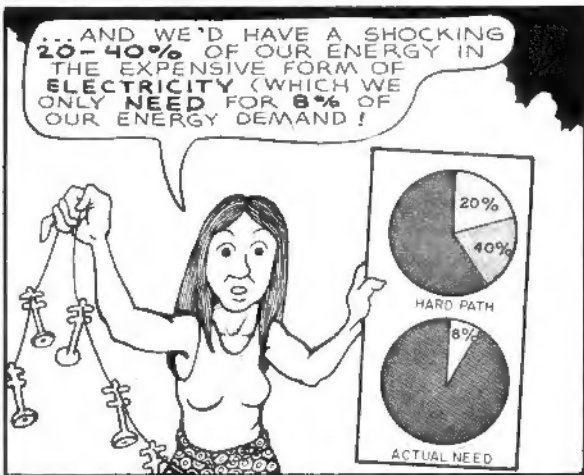
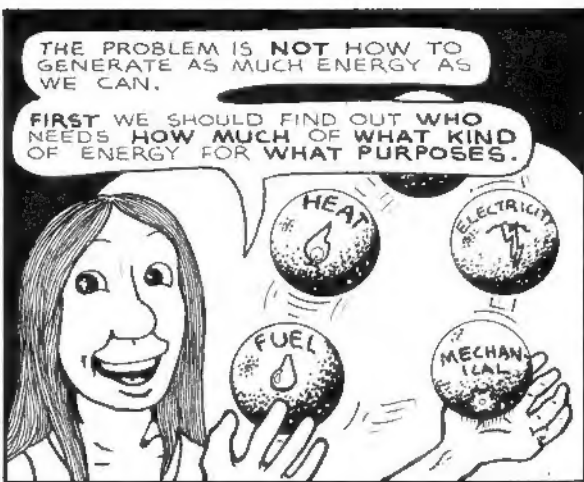
"HARD" vs. "SOFT"

ALTERNATIVE LONG-RANGE ENERGY STRATEGIES

"OUR KNOW-HOW HAS
FAR OUTSTRIPPED OUR
KNOW-WHY..."
AMORY LOVINS



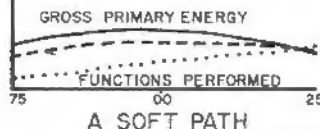
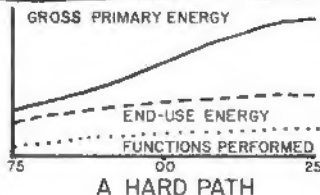




LOOK, HONEY, MAYBE YOU LIKE LIVING IN A TREE BUT MOST AMERICANS ARE GLAD TO HAVE REFRIGERATORS AND T.V.'S AND WE'RE NOT GOING TO LET YOU FORCE YOUR LIFESTYLE ON THE REST OF US !!

I'M NOT TALKING ABOUT GIVING UP APPLIANCES! I'M SAYING WE COULD POWER THEM IN WAYS THAT WOULDN'T TURN BREATHING INTO A HAZARDOUS ACTIVITY!

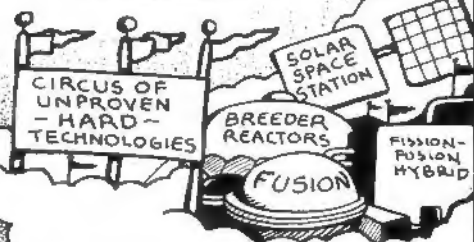
LOOK AT THIS! IN YOUR PLAN SO MUCH ENERGY IS WASTED TURNING HEAT INTO ELECTRICITY, GETTING LOST IN THE TRANSMISSION WIRES, AND SO ON, THAT THE **USABLE DELIVERED ENERGY** IS ALMOST THE SAME!



BUT MY PLAN IS **PRACTICAL!!** YOURS IS ONLY A WISHFUL FANTASY!!

NO. THE SOFT ENERGY PLAN I'VE DESCRIBED IS BASED ENTIRELY ON **PROVEN TECHNOLOGIES.***

THE **HARD PATH** GOES TO A FANTASYLAND.



- * SUCH AS:
- BIOCONVERSION OF AGRICULTURAL AND FORESTRY WASTES
 - PYROLYSIS OF MUNICIPAL WASTES
 - VERTICAL AXIS WIND ELECTRICITY
 - RETROFITTED SOLAR SPACE HEAT

LISTEN, WE'VE BEEN LOOKING INTO SOLAR POWER AND IT'S JUST NOT COMPETITIVE FOR POWER PLANTS!

BESIDES, A SOLAR STATION BIG ENOUGH TO REPLACE A COAL OR NUCLEAR PLANT WOULD BE 50 SQUARE MILES!

THERE YOU GO AGAIN **ASSUMING** THAT WE NEED BIG ELECTRIC POWER PLANTS!

IT'S THE WASTEFULNESS OF **BIG ELECTRIC PLANTS** THAT MAKES YOUR PLAN SO **EXPENSIVE** AND **DIFFICULT!**

NOW LET ME GET THIS STRAIGHT...YOU SAY WE DON'T NEED BIG ELECTRIC POWER PLANTS?

WE **HAVE** BIG ELECTRIC POWER PLANTS. I'M SAYING WE DON'T NEED TO BUILD **MORE** OF THEM.

MAYBE WE COULD CALL OFF THE NEW POWER PLANT AFTER ALL?



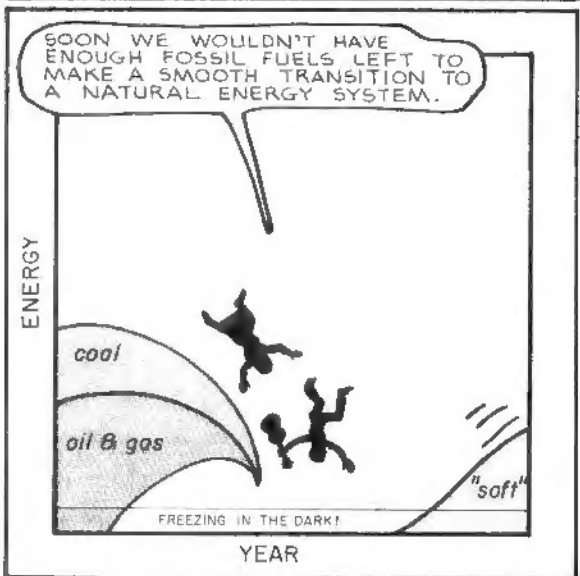
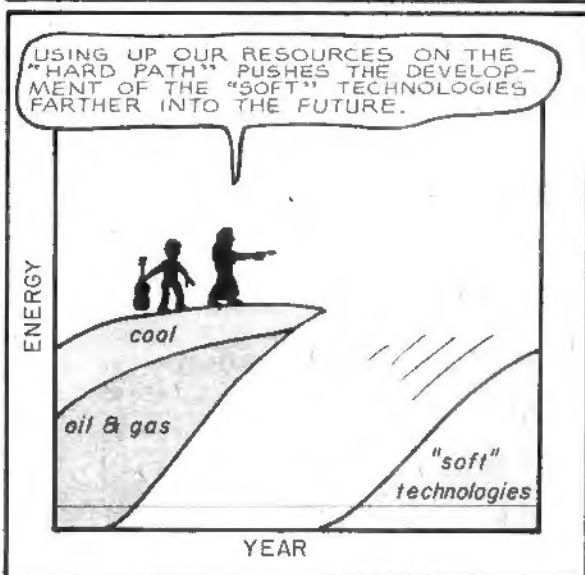
SO! FROM NOW ON WE GET OUR NEW ENERGY FROM SUNBEAMS AND BREEZES! DON'T YOU KNOW WHAT THAT WOULD COST?

TAKING THE "SOFT PATH" WOULD BE EXPENSIVE, BUT IT WOULD BE **CHEAPER** THAN NOT TAKING IT.

THE "HARD PATH" WOULD COST EVEN MORE!

APPROXIMATE COST OF ENERGY TO U.S. CONSUMERS 1976 \$/BBL



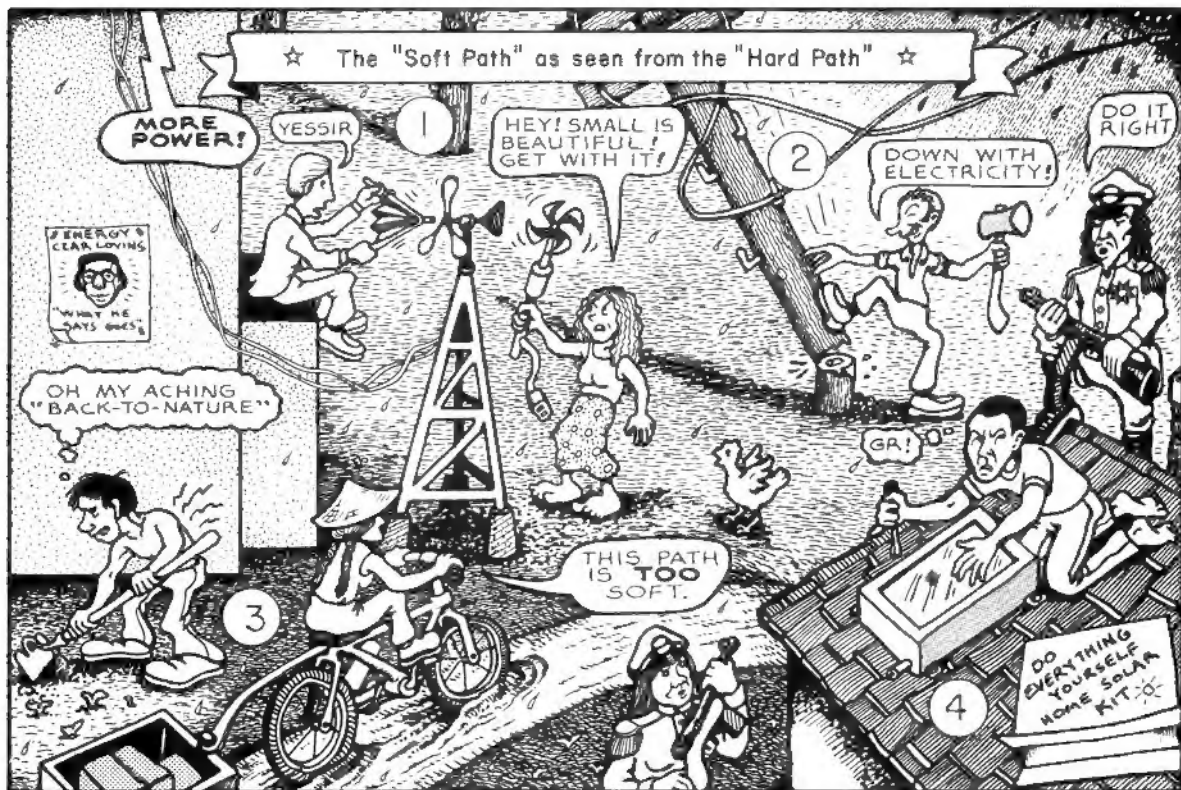


AMORY LOVINS HAS CONTRASTED TWO ENERGY STRATEGIES. SIMPLIFY, THE "HARD PATH" USES FOSSIL AND NUCLEAR FUELS TO INCREASE ENERGY SUPPLIES; THE "SOFT PATH" USES RENEWABLE SOURCES SUCH AS SUN AND WIND TO MEET OUR ENERGY NEEDS.



LOVINS CLAIMS THAT THE "SOFT" STRATEGY IS CHEAPER, FASTER, AND EASIER. NATURALLY THIS CLAIM HAS BEEN FIERCELY CHALLENGED. AN AMAZING NUMBER OF CRITICISMS, HOWEVER, ARE BASED ON MISUNDERSTANDINGS OF WHAT LOVINS HAS PROPOSED. FOR EXAMPLE...

WHAT'S WRONG WITH THIS PICTURE?



① **"SOFT" DOES NOT MEAN "SMALL".** THE "SOFT PATH" DOES NOT PROMOTE SMALLNESS FOR ITS OWN SAKE, BUT RATHER TRIES TO MINIMIZE THE COSTS (INCLUDING SOCIAL COSTS) AND THE LOSSES OF ENERGY DISTRIBUTION BY SUPPLYING ENERGY AT THE RIGHT SCALE FOR THE JOB.

② **THE "SOFT PATH" DOES NOT IMPLY SHUTTING DOWN OUR PRESENT ENERGY SYSTEM.** INSTEAD IT IS A PLAN FOR GRADUALLY REPLACING OUR SYSTEM OVER 50 YEARS WITH "SOFT" INSTEAD OF "HARD" SYSTEMS.

③ **THE "SOFT PATH" DOES NOT ASSUME CHANGES IN LIFESTYLE.** THE "SOFT PATH" CAN SUPPORT THE SAME LIFESTYLE AS THE "HARD PATH" (CARS, T.V., BIG CITIES, ETC.) AND ALSO ALLOW FOR MORE DIFFERENT LIFESTYLES.

④ **THE "SOFT PATH" NEED NOT BE COERCIVE.** SINCE THE "SOFT PATH" IS CHEAPER, CLEANER, SAFER, AND DOES NOT REQUIRE LIFESTYLE CHANGES, MOST PEOPLE WOULD PROBABLY PREFER IT. NO ONE SHOULD BE FORCED TO USE ENERGY EFFICIENTLY. IT IS ENOUGH THAT PEOPLE PAY THE REAL COSTS OF THEIR ENERGY.

HOW CAN WE GET ON THE "SOFT PATH"?

WE'LL HAVE TO OVERCOME THE OBSTACLES THAT ARE KEEPING US OFF OF IT!

OBSTACLES

1. GOV'T SUBSIDIES TO THE "HARD PATH".
2. UNRESPONSIVE ENERGY MONOPOLIES.
3. "INSTITUTIONAL BARRIERS", TAX LAWS, BLDG CODES, ETC.
4. ARTIFICIALLY CHEAP DEPLETABLE FUELS.
5. MOST PEOPLE LACK MONEY TO INSTALL ENERGY-SAVING AND "SOFT" TECHNOLOGIES.

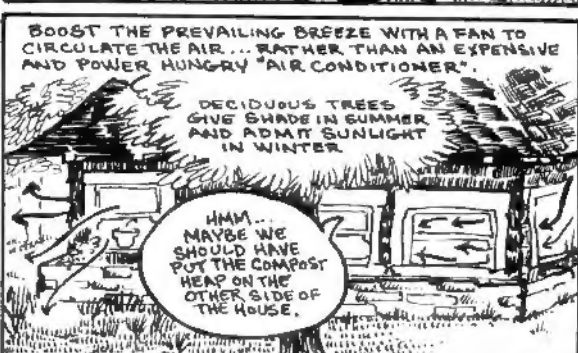
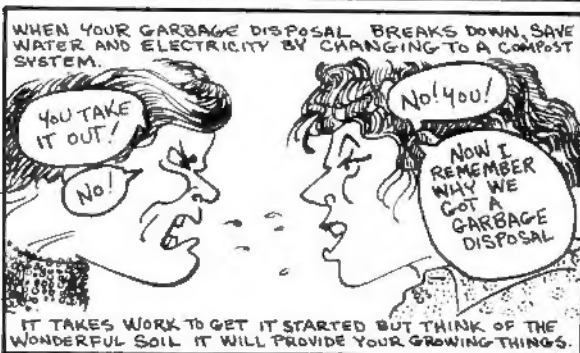
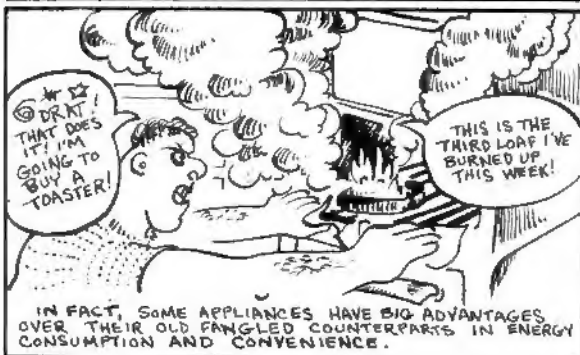
WHAT WE CAN DO

1. DEMAND AN END TO SUBSIDIES.
2. DEMAND ENFORCEMENT OF ANTITRUST LAWS. CHALLENGE ALL NEW INVESTMENTS IN THE "HARD PATH".
3. REFORM TAX LAWS, BLDG CODES, ETC...
4. TAX DEPLETABLE FUELS TO BRING THEM UP TO THEIR TRUE REPLACEMENT COSTS.
5. ASK UTILITIES TO LEND MONEY TO CONSUMERS INSTEAD OF BUILDING POWER PLANTS.*

* THIS WOULD ALSO BENEFIT THE UTILITIES BY IMPROVING THEIR CASH FLOW.

"IGNORANT, SELF-INDULGENT CONSUMERS" ARE NOT THE KEY CULPRITS IN THE PRESENT ENERGY CRISIS. IN OUR LAVISHLY WASTEFUL SYSTEM, IT USUALLY HASN'T BEEN WORTH PEOPLE'S TIME TO BECOME EDUCATED, EFFICIENT CONSUMERS. TRYING TO CHANGE A WHOLE SYSTEM IS FRUSTRATING WORK. MEANWHILE, WE CAN SEE FASTER RESULTS AND SAVE OURSELVES SOME MONEY BY BEING....

ECO-CORRECTO!



KEEP YOUR GAS WATER HEATER ON LOW, AND WHEN IT NEEDS REPLACING GET AN ELECTRIC IGNITION PILOT ON THE NEW ONE



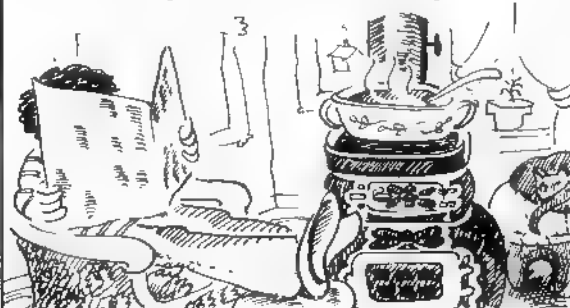
A PILOT LIGHT OFTEN CONSUMES MORE GAS THAN THE APPLIANCE USES IN SERVICE.

HEAT RISES, THEREFORE A FAN TO HELP CIRCULATE AIR FROM CEILING TO FLOOR (AND ROOM TO ROOM) SAVES MONEY AND FUEL BY MAINTAINING AN EVEN ROOM TEMPERATURE.



INSULATION IS FINE, BUT IN MODERATE CLIMATES AIR CIRCULATION AND BUILDING DESIGN ARE MUCH MORE IMPORTANT FACTORS IN MAINTAINING COMFORTABLE TEMPERATURES.

BLESS THE MIRACULOUS FRANKLIN STOVE (OR REASONABLE FACSIMILE)



ITS NOT ONLY VERY EFFICIENT AT HEATING BUT YOU CAN COOK ON IT TOO!

OR- IF THE FORMER SUGGESTION ISN'T YOUR STYLE - LEARN TO URINATE IN THE BATH-TUB, RINSING THE TUB AFTER WITH A QUART OF WATER, YOU WILL KEEP YOUR TOILET CLEAN SMELLING AND SAVE ABOUT SEVEN GALLONS OF WATER EACH TIME



WARNING! MANY OF YOUR BEST FRIENDS WILL BE REPELLED BY THIS RADICAL IDEA!

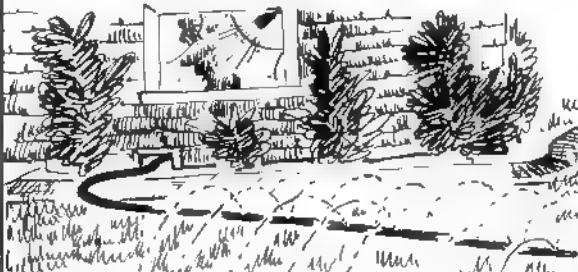
BOOKS, WALLHANGINGS AND DRAPE ON OUTSIDE WALLS ALL HELP PREVENT HEAT LOSS (OR GAIN) ALONG WITH THE USUAL WALL INSULATION AND DOOR STRIPS.



BAKE IN THE MORNING TO HELP HEAT THE HOUSE. REMEMBER, IT TAKES THE SAME AMOUNT OF HEAT TO BAKE ONE ITEM OR MANY



WATER GETS DOUBLE USE IF YOU DIVERT YOUR BATH OR SHOWER DRAIN TO A HOSE WITH A LAWN SPRINKLER AT THE END



UNFORTUNATELY, NO BUILDING INSPECTOR IN THE COUNTRY WILL GO ALONG WITH THIS WONDERFUL IDEA

BEST ECO-ADVICE EVER: USE BIRTH CONTROL AND HAVE EXACTLY THE NUMBER OF CHILDREN YOU DESIRE, AND NOT ONE MORE!



END.

ANG PLANTANG NUKLEAR

What does a poor nuclear reactor manufacturer do when nobody at home wants to buy more nukes? They do what U.S. multinationals always do when stuck with unsalable goods--- dump them in Third World countries.

Westinghouse (or General Electric) supplies the reactor--- and often the "sweetening" bribe needed to win the deal; the U.S. Export-Import Bank (read "tax dollars") provides the funds, the Nuclear Regulatory Commission grants the export license. Receiving countries, usually politically repressive regimes, gain a mammoth symbol of "modernity", nuclear weapons capability, and the highly centralized technological infrastructure so important in maintaining internal "stability".

Everybody wins! --- well, not quite everybody.

For three years, the peasants, fishing people and workers of Morong, Bataan have been fighting the construction of the Philippines first nuclear power plant. Forced relocation without compensation, the destruction of farming and grazing land, as well as the local fishing industry, led to the formation of the Movement of Concerned Citizens of Bataan. Despite martial law, the Movement collected 50,000 signatures nation-wide on a petition to stop plant construction.

Joining ranks with Filipino environmentalists, the Movement pointed to the dangerous absurdity of siting a nuclear plant on an active volcano, near five earthquake faults, in an area hit by tidal waves!

The \$1.1 billion project, nearly a third of the country's external debt, will provide electricity mainly for export industries -- not for the 70% of the population who lead malnourished lives in the countryside.

The fight to stop this export has become an international one. 33 cities around the world participated in an International Day of Protest on June 5, 1979.

So much noise has led the NRC and even President Marcos to reconsider. But what about the billions of tax dollars which the Export-Import Bank is quietly funneling into Westinghouse and G.E. coffers via sales to South Korea, Taiwan, Mexico...? Hmmm.

Lyuba Zarsky

NUKLEAR KOMIKS

The illustrations on these two pages are from the comic book "Napocor NUKLEAR KOMIKS, vol. 1, no. 1", which was published in the Philippines by Pambansang Korporasyon sa Elektrisidad (National Corporation of Electricity)

"NUKLEAR KOMIKS" tells two stories, "The Fisherman and the Nuclear Plant" and "There was a Love".

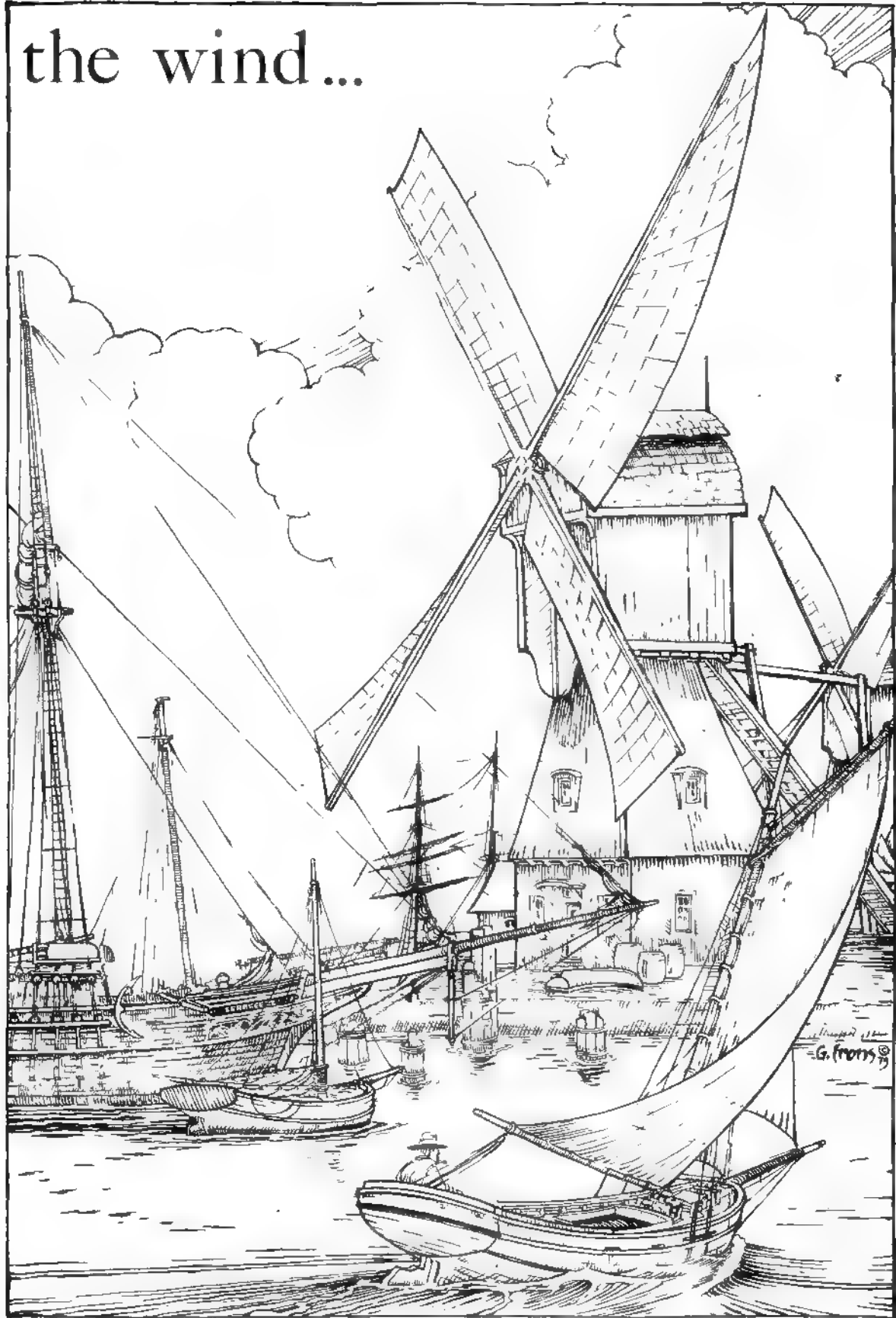
In the first story, Senyong, a fisherman, is unhappy about the construction of a nearby nuclear power plant which he thinks will pollute the waters and kill all the fish. The neighborhood chairman decides "Unfortunately we have no explanation that can convince Senyong, so the best thing is to wait until the plant is in operation and see what effects it will have on our lives." After the plant goes into operation, Senyong sees that the fish are still plentiful and consequently that "there is no pollution in the sea from the operation of the nuclear plant." The story concludes with Senyong admiring the beautiful, useful nuclear plant.

In the second story, Gerardo, a "scholar", returns to the Philippines and to Ofelia, his love. He had been studying and working on a moon shot in the United States. Gerardo tells his countrymen that he has returned to help in the construction and operation of a nuclear power plant. Gerardo says "I know your doubts, fellow countrymen, but they are baseless." After describing the benefits of nuclear power he concludes, "I am a Filipino, a native of this place. My relatives and friends are here and all those dear to me. Do you think I would endanger them all with the nuclear plant?" The plant is then built. When people try to thank Gerardo for the wonderful nuclear plant he tells them "thank the national leadership under President Marcos."

"NUKLEAR KOMIKS" argues that the Philippines need a nuclear power plant because of rising gas, kerosene, and oil prices, and the growing burden that importing these fuels places on national finances. It tells Filipinos that cheap, safe, abundant nuclear power will create jobs and prosperity, prevent brown-outs, and contribute to the progress of the nation.

Both stories generally ignore the serious anti-nuclear arguments. Ignoring these critical arguments is easier than refuting them.

the wind...



GRED **G**RIZBEE WAS
 NOT ESPECIALLY IN-
 SPRED BY HIS JOB AS
 A CLERK IN THE PU-
 PLASTICS CORPORA-
 TION. IN FACT, HE
 WAS A TYPICAL
 NEUROTIC WRECK
 FROM THIS JOB!!

ONE NIGHT FRED GOT FED UP WITH THE TV AND THREW IT OUT THE WINDOW. ALL MY FAMILY WAS GOING

WHAT'RE WE
GONNA DO WITH
EAT 'EM
WITH A TAIL

THE WALKER & BROWN CO.
 100 N. J. ST. N. Y. C.
 A. H. WALKER & BROWN CO.

ANTLY GAVE UP HIS JOB SECURITY
TO JOIN IN THE NEW VENTURE

WEDNESDAY, NOVEMBER 10, 1960
The first day of the week was spent in the office.
I went to work at 8:30 AM and stayed until 5:30 PM.
There were no meetings or appointments today.

SEE TOLD
YOU HEALTH FOOD
COULD TASTE GOOD!



FAMILY, AND SAW THAT THEIR NEW
CULTURE WAS BEING USED TO
TO SPREAD THE WORD OF THIS SIM
PLER WAY OF LIFE TO OTHER LOST
URBAN MIDDLE CLASS SOULS.

L N T M H
M T W A T A Y D
F R S L P U I A T H E
P H C Y N W W I d
W G L A K V L S
S L M S W L
L S D H E W O
A W A N H

SHE INSISTED THAT FRED STOP EATING JUNK FOOD AND SHOWED HIM THE MEDICAL RECORDS OF HIS AUNT AND UNCLE WHO HAD DIED FROM HEART DISEASE.

CA. THIS FILE "AIR APPROPRIATE"

MR. APPROPRIATE

© 1977
BY
B. COHEN &
M. BARINES

MR. APPROPRIATE
DISCOVERS
POWER PLANT POLITICS

THE BATTLE WITH
REDDY KILOWATT



IT'S A SMALL
DENT OPERATOR
HALL
W/ A LITTLE
W/ A LITTLE
W/ A LITTLE



MR. APPROPRIATE GOES TO THE
FARM TO SEE THE POWER PLANT
THAT'S IN THE MATTER.

WHAT'S TO BE DONE?
WE CAN'T JUST LET THIS
HAPPEN BUT HOW DO YOU
HEAVE OUT
POWER MONEY
HIT THE



I'M GONNA
SHUT YOU UP TIL AFTER
THE HEARING LOOK I'VE
BROUGHT ALONG SOME LUNCH
MCDONALD'S HAMBURGERS AND
A BIG OLD CUP O' COCA COLA!
EAT UP FRED!



WILSON, A LOCAL FARMER MAKING
A DELIVERY OF TWO CRATES
CARROTS AND ONE OF RADISHES



MR. APPROPRIATE'S NEW
BIKE AND PEDALS OF HIS NEW
"ECO FREAKS"

WE CAN'T LET THEM
GET AWAY WITH THIS



SUDDENLY AN EERIE GLOW
FLUOS THE SKY, AND THERE IS
A SUDDEN FLASK OF LIGHT.

GOOD LOCATION FOR
A POWER PLANT
DON'T YOU THINK
MR. APPROPRIATE?



THIS NEW PLANT WILL
GIVE A LOT OF PEOPLE JOBS
FELLA, AND ALLOW MORE INDUS
TRY TO MOVE INTO THE AREA!
HERE, HAVE SOME DESSERT!
THESE DELICIOUS HOSTESS
CUP CAKES AND A
WHOLE CONTAINER OF
DRENN WHIP!



I'M MAD NUFF TO SHIT? I JUST
LEARNED THAT THE SMOG FROM
THE NEW POWER PLANT THEY'RE
BUILDING OVER HERE'S GONNA
BE SO TOUGH TO BREATHE
CENT CROPS IN THIS WHOLE
AREA!



YES, THEY'RE AT IT AGAIN!
THEY RAISE OUR RATES FAST
LAWY EVERY MONTH SO THEY CAN
AFFORD TO SPEND MILLIONS ON
POWER PLANTS WE
DON'T NEED!

ALL IT DOES
IS MAKE MORE
POLLUTION!



REDDY
KILOWATT
WHAT'RE YOU
DOING HERE?

NEW I SEE
I'M A TROUBLE
SHOOTER FOR
THE COMPANY
MR. APPROPRIATE
YOU WHERE
THEY SEND ME!



AND NOW THAT
I'VE CHOWED DOWN YOU'VE
GONNA RELAX AND CATCH SOME TV
HERE, SIT ABOUT FOUR FEET FROM
THIS ZANICHOLOR TV SET.
WHAT'LL IT BE, MR. KILOWATT OR
MEAT GRIFFITH?



WHAT I WOULD PLANT??
WHERE??

YOU AIN'T HEARD
ABOUT IT? THE UTILITY
COMPANY IS BURNING A
NEW BURNING COMPLEX
RIGHT OVER HERE



AND IT GIVES BUCKS TO
THE POWER COMPANY'S
CORPORATE BUDDIES THE BIG
CONSTRUCTION FIRMS, AND LINES
THE POCKETS OF A FEW PLUTO
FATS!

AND BESIDES THERE IS
SO MUCH ENERGY SQUANDERED
ON THIS EARTH IT'S SET
WE COULD GET BY EASILY
ON HALF THE ENERGY
WE USE NOW



WE'RE GONNA PUT
THESE PLANTS THROUGH
AND WE'VE GONNA STAND IN
OUR WAY NOT YOU OR ANY
DAMN BUNCH OF LUNATIC
FRINGE ECOLOGY NUTS!

YOU GOT THAT,
JOKER?



NOW DON'T YOU FEEL
A LITTLE BETTER?
A GOOD LIFE, HAL, FOR
GET THIS CRAZY ECOLOGY CRAP!
SEE YA LATER, MISTER APPROPRIATE!



MR. APPROPRIATE COME OUT OF
JUNKYARD STUPOR IN TIME
TO THE POWER PLANT TIME

Mr. Appropriate



©1979
by
Martin
Barnes
and
R. Crane

★ MR. APPROPRIATE ★ GOES INTO ★ POLITICS ★

IT ALL STARTED WHEN FRED PRIZBEE GRADUALLY BECAME POPULARLY KNOWN IN HIS NEIGHBORHOOD AS "MR. APPROPRIATE." LOCAL FOLKS ADMIRER WHAT HE STOOD FOR AND THE ENERGY HE PUT OUT TOWARDS IMPROVING THE QUALITY OF LIFE IN THE CO.

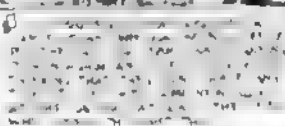
WHEN AN CAUSES, HE'D LEARNED HOW TO EFFECT CHANGES FOR THE

PEOPLE BEGAN TO COME TO HIM AND JOIN COMMITTEES COME ACTION GROUPS THEY ASKED HIM TO SPEAK AT MEETINGS. TO GIVE LECTURES ON APPROPRIATE TECHNOLOGY AND ITS PRACTICAL APPLICATION. HE LEARNED THE ART OF EFFECTIVE PUBLIC



WAS A FORCE TO BE RECKONED WITH. IT WAS AT THIS POINT IN HIS CAREER

MR. APPROPRIATE HAD BEEN TAUGHT SINCE SECOND GRADE THAT RESPONSIBILITY FOR THE WORLD—AND GREAT CHANGES COULD BE BROUGHT!!



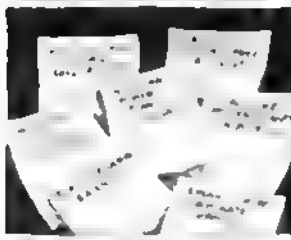
STILL, EVEN THOUGH HIS A BIT SCREWED UP, THE TIME WAS RIPE FOR SOME NEW IDEAS, AND MR. APPROPRIATE WAS ELECTED. HE WENT TRIUMPHANTLY OFF TO THE CAPITOL AND TOOK ALONG SILKSMOOTHE SMYTHE AS HIS PRESS SECRETARY AND CHIEF OF STAFF.



SILKSMOOTHE SMYTHE TAUGHT FRED HOW TO BE A MEDIA STAR SO THAT HE COULD BE MORE EFFECTIVE. THE PRESS PICKED UP ON MR. APPROPRIATE RIGHT AWAY BECAUSE HE WAS SOMETHING DIFFERENT. HE HAD A BEARD. HE WOOD OVERALLS, AND HE KEPT SAYING "APPROPRIATE!" THE MEDIA JURED HIS IMAGE

MEANWHILE, HOME, FRED'S GARDEN WAS A MESS. MRS. PRIZBEE DIDN'T HAVE TIME TO KEEP FRED WAS HARDLY EVER HOME. HE HAD THROWN THEIR TV DOWN THE FEE!

FRED STARTED GAINING WEIGHT BECAUSE HE WAS NOW EATING LOTS OF RICH GOURMET FOOD IN FANCY RESTAURANTS.



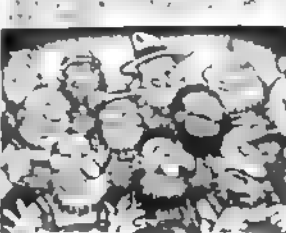
WAS NO ONE WAS LISTENING TO HIM, AND EACH TIME THERE WAS A VOTE, FRED'S BILLS



UNTIL THEY ATTACHED A ROP TO THE BILL AND BY THE

THEY VOTE APPROPRIATE PIPELINES

MR. APPROPRIATE QUIT POLITICS, WENT BACK HOME, AND HIS WIFE AND KIDS WERE SO HAPPY THAT THEY CELEBRATED BY THROWING THE TV OUT THE WINDOW AGAIN.



THE SUN IS THE ULTIMATE SOURCE OF ALMOST ALL EARTH'S ENERGY—PLANTS TRANSFORMING SUNLIGHT INTO FOOD AND FOSSIL FUELS, WATER MOVING THROUGH EVAPORATION. BUT NOW WE MUST FIND MORE EFFICIENT METHODS OF TAPPING SOLAR POWER. RECENTLY DEVELOPED SILICON CELLS CONVERT SUNLIGHT TO ELECTRICITY, BUT ON EARTH THEIR USE IS LIMITED TO SUNNY DAYS. SCIENTISTS PROPOSE AN ORBITING SOLAR POWER PLANT, COLLECTING SUNPOWER 24 HOURS A DAY AND BEAMING IT TO EARTH VIA MICROWAVES. IT COULD FUNCTION AS A SPACE LAB AS WELL AS A SOURCE OF POLLUTION-FREE, INEXHAUSTIBLE ENERGY.

© SHARON K. RUDAHN '78

I'VE BEEN WONDERING, DAD—HOW MANY TRIPS DID IT TAKE THE EARTH PEOPLE TO BRING US ALL OUR AIR, SOIL AND EQUIPMENT?

OH, IT WASN'T LIKE THAT, DAUGHTER, THO THE WAY THEY GRIEDED ABOUT COSTS, YOU MIGHT HAVE THOUGHT SO!

SOLAR CELL PANELS

22,000 MILES

MICROWAVE BEAM

POWER CONVERTOR & SPACE LAB—INNER RING ROTATES TO CREATE GRAVITY

MIRROR CONCENTRATORS

YUP, THE COMMUNES 'BOUT READY FOR ITS SOFTEST WINTER SINCE THOSE SCIENTOLOGY TERRORISTS BLEW UP THE LAST SOLAR SATELLITE.

WINDMILL'S REPAIRED, SOLAR COLLECTORS ON ALL THE ROOFS, METHANE GENERATOR GOING IN THE CHICKEN COOP—NOTHIN' LEFT TO DO BUT GO FISHING!

YOU KNOW, I'M ACTUALLY BEGINNING TO HOPE WE'VE SEEN THE LAST OF THOSE MUTATIONS FROM THE STRAY MICROWAVES.

THOSE DAMN PIE IN THE SKY SOLAR STATIONS—GUESS OUR PARENTS JUST FELL FOR THE SAME OLD HORSESHIT! THE SCIENTISTS IN CHARGE MUST KNOW WHAT THEY'RE DOING?

AND THEN PROPOSITION 113: "NO TIE IN TO THE SOLAR GRID FOR COMMUNES OR INDIVIDUALS UNDER INVESTIGATION FOR SUBVERSION."

WASN'T THAT ABOUT THE TIME THE FUNNY PLANTS AND ANIMALS STARTED TO SHOW UP?

THEN OIL LEAGUE KAMIKAZE PILOTS SEIZED THE NORTH HEMISPHERE SATELLITE, AND CONSCIOUSNESS RADICALS THE SOUTH... DO YOU THINK THE BURNED LANDS WILL EVER BE RECLAIMED?

I THINK WE'D BETTER STICK TO TENDING OUR OWN GARDEN.

JUST ABOUT THE TIME YOU WERE BORN, THE SAVINGS ON EARTH'S POWER COSTS MADE BACK THE INITIAL INVESTMENT TO GET THE SOLAR COLLECTORS OUT HERE. WE SET UP THE MOON SHUTTLE FOR MINING OXYGEN AND MINERALS FROM LUNAR SOIL, STARTED CONSTRUCTING OUR OWN EQUIPMENT—BEEN TURNING A PROFIT FOR EARTHPEOPLE AND SPACEPEOPLE EVER SINCE!!

UNLIMITED CLEAN ENERGY FOR EARTH—NO MORE POLLUTION, DANGEROUS NUCLEAR POWER PLANTS, GASOLINE WARS—FREE MASS TRANSIT SYSTEMS, AND WARMTH AND LIGHT IN EVERY HOME...

TEACHER TOLD US THEY TURNED THE SAHARA INTO AN AVOCADO FARM!

AND, BEST OF ALL, PEOPLE OF ALL NATIONS HAVE HAD A CHANCE TO WORK TOGETHER FOR HUMANKIND ON A WAY STATION TO THE STARS!

PIE IN THE SKY

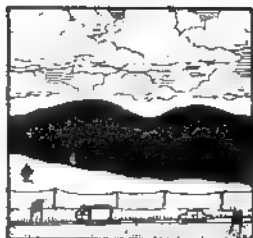
the Black Hills



areas of exploration
for uranium, 1977

PAHA-SAPA THE BLACK HILLS

© 1979 BY LEONARD RIFAS, INKS BY RINALDO FERRINO



In the 1868 Fort Laramie Treaty, the U.S. government recognized the right of the Lakota nation to an area which included the Black Hills. The Black Hills (Paha Sapa) were and are the holy land of the Lakota people.



The U.S. promised that the Lakotas' right to their land would be respected as long as the grass grows. Shortly thereafter, however, a GOLD RUSH descended on the hills and the land was stolen.

SOUX (LAKOTA)
RESERVATIONS
1889

WHO WAS IT
THAT SAID
"HISTORY DOESN'T
REPEAT ITSELF, BUT
IT RHYMES"?



THERE'S A NEW RUSH IN THE
BLACK HILLS! GANT CORPORATIONS
ARE COMING AFTER URANIUM
(UP TO \$800 BILLION WORTH) FOR
NUCLEAR POWER PLANT FUEL AND
ATOM BOMB WARHEADS!



OUTSIDERS THREATEN TO SACRIFICE
THIS AREA TO THEIR AMBITIONS
AND LEAVE BEHIND RADIOACTIVE
CONTAMINATION, DRY WELLS, AND
BOOMED-OUT "BOOM-TOWNS"!

THAT'S
AWFUL!



I WANT TO
HELP THE
INDIANS DEFEND
THEIR LAND!

FINE! HERE'S
YOUR BUTTON!
STAND IN
LINE!

I WANT TO
HELP THE
INDIANS BE
SAVED FROM
SIN!

I WANT TO
HELP THE
INDIANS
BECOME
CIVILIZED!

I WANT TO
HELP THE
INDIANS
PRESERVE
THEIR CULTURE

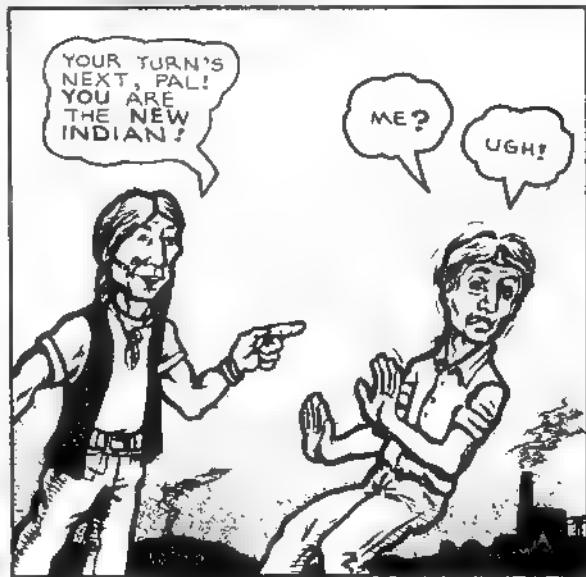
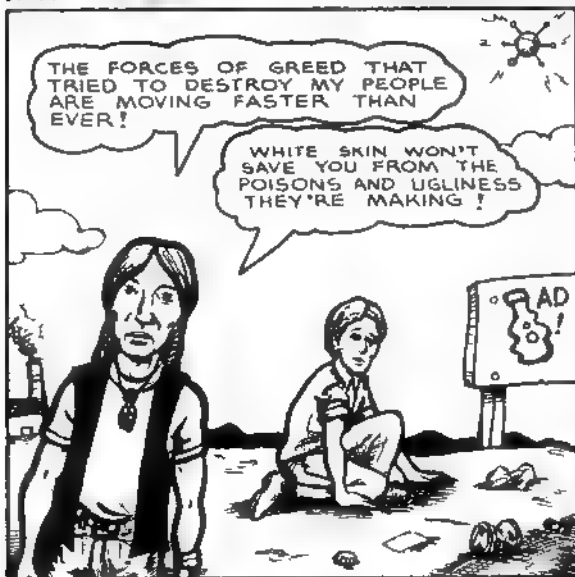
I WANT TO
HELP THE
INDIANS
DEVELOP
THEIR ECONOMIES





* \$10 REWARD FOR A CONVINCING FOOTNOTE.

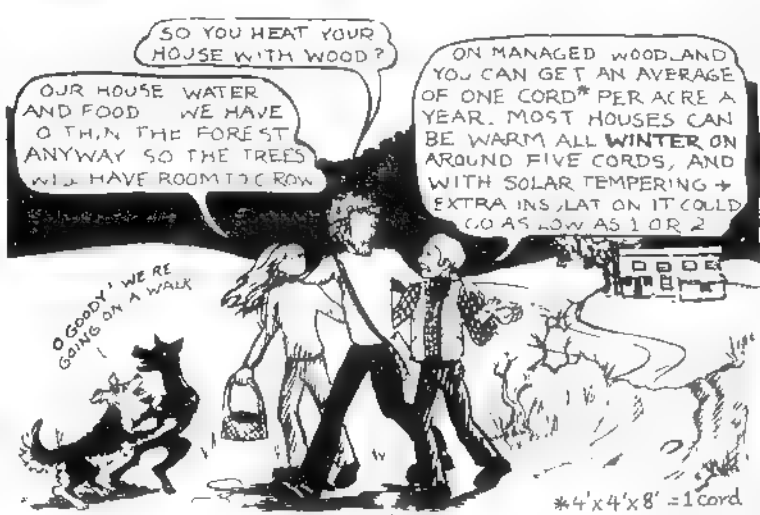
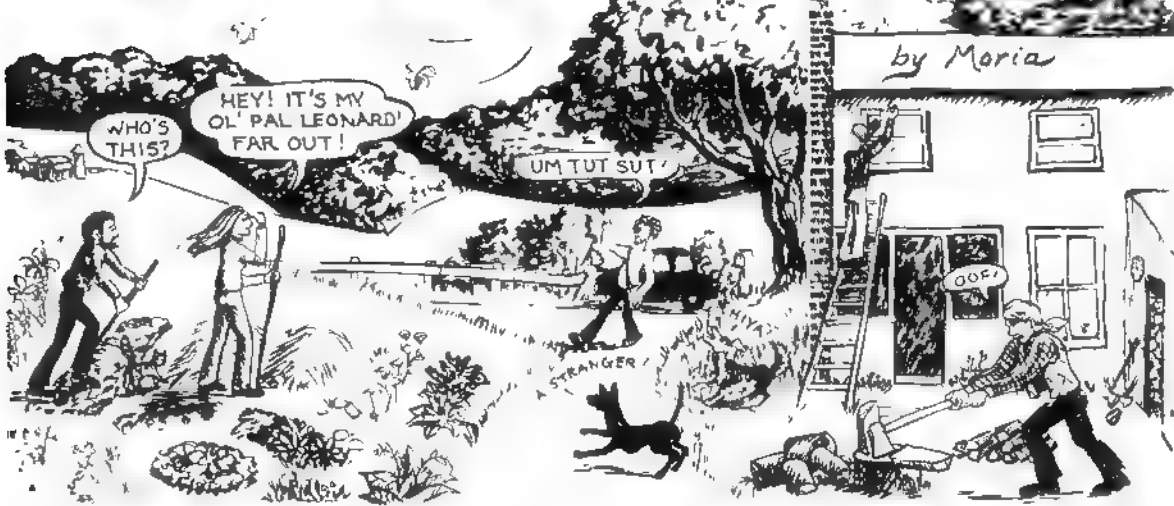






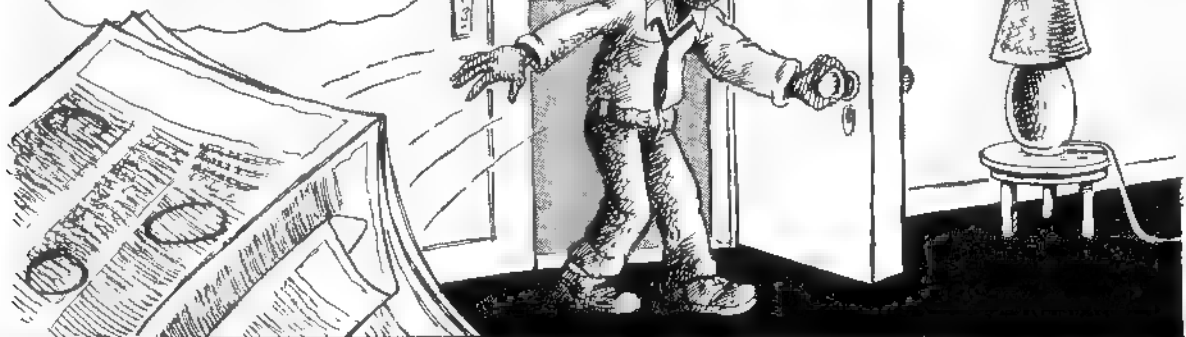
WOOD HEAT

by Moria



JOB\$ and ENERGY

I'M BEAT!!



NO WORK AGAIN !....



CAN'T MOVE



DOWN
TO MY LAST
ONE!!

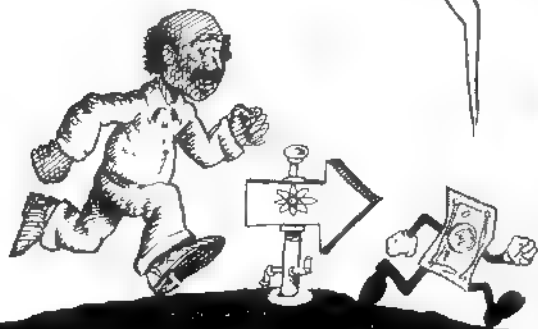


HEY!! COME BACK!

CATCH
ME!!



I'M GOING TO HELP BUILD THE
ENERGY SYSTEM OF TO-
MORROW!



WOW! LOOK AT THEM ALL GO!
THEY'RE THICK AS LEMMINGS!



THEY ALL RAN IN HERE.
WHERE DO THEY COME OUT??

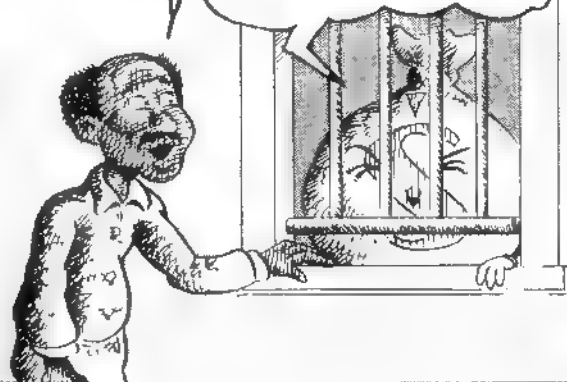


AH! THE PAYROLL....
MAYBE I CAN GET
ON IT !!



NEED
ANY
HELP?

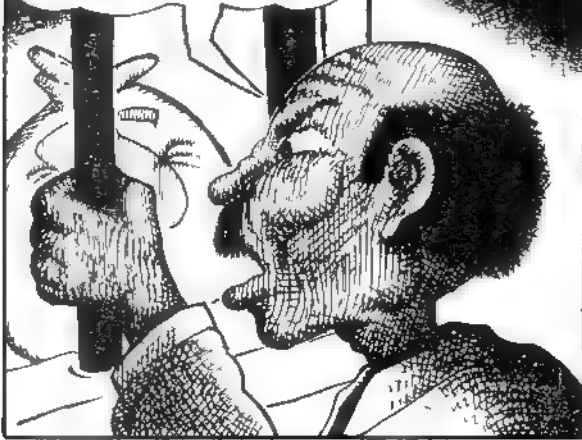
POSSIBLY, IF
YOU'RE CRE-
DENTIALS ARE
IN ORDER



WE'RE ONLY HIRING
ENGINEERS AND
MATHEMATICIANS
TODAY.



WHAT'S HAPPENING HERE ?!
WHAT ARE YOU DOING
WITH MY DOLLAR ?

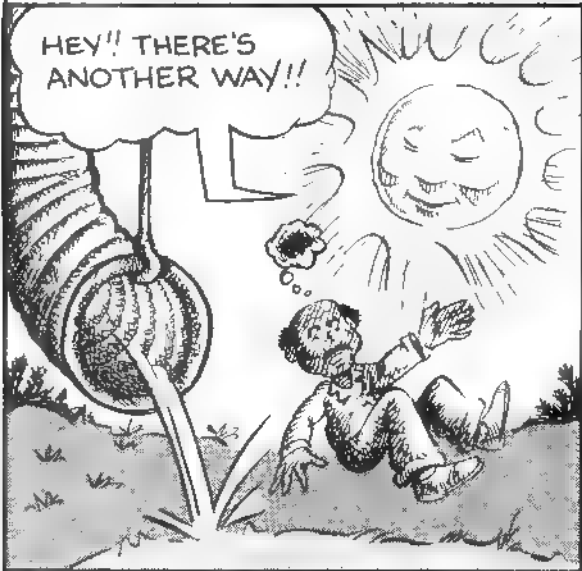


WHEN'S THIS HEALTHY
ECONOMY I HEAR ABOUT
GOING TO START ??

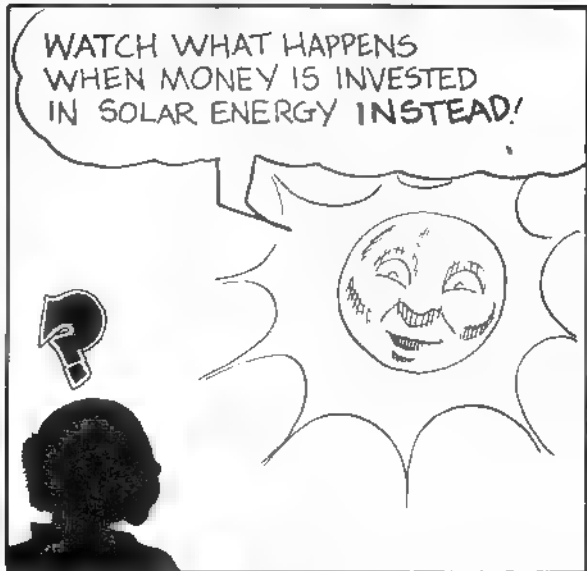


WUP!

HEY!! THERE'S
ANOTHER WAY!!



WATCH WHAT HAPPENS
WHEN MONEY IS INVESTED
IN SOLAR ENERGY INSTEAD!



INDUSTRY CLAIMS YOU
NEED ENERGY TO
CREATE JOBS, BUT
ENERGY REPLACES
JOBS WITH
ABOR SAVING
MACHINERY!

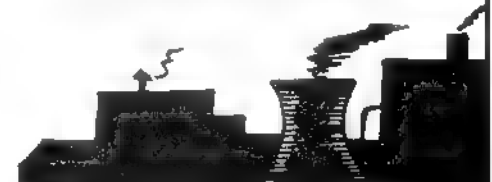
FOR THE
ENERGY THAT
IS NEEDED
SOLAR AND
CONSERVATION
HAVE MANY
ADVANTAGES!

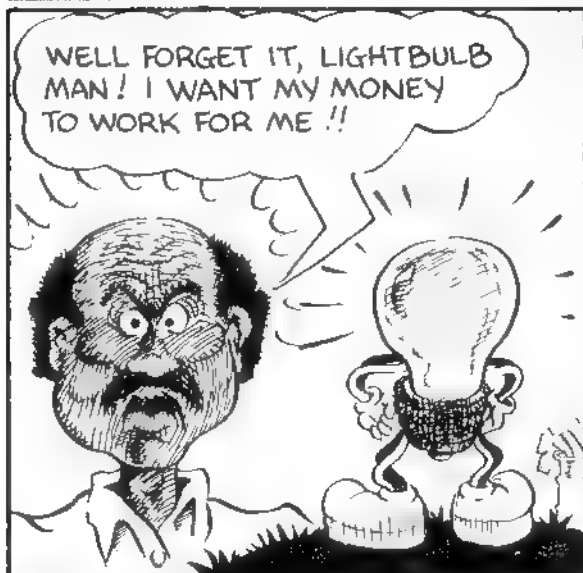
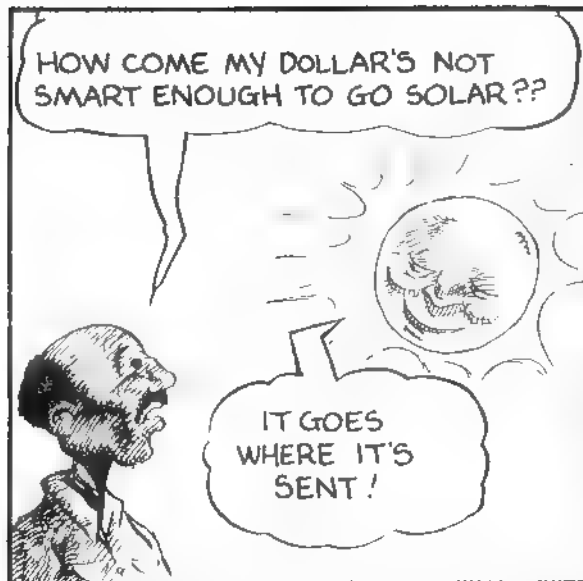
SOLAR and CONSERVATION

- 1 MORE JOBS created for the same amount of money invested
- 2 JOBS FOR PEOPLE WITHOUT MUCH TRAINING OR EXPERIENCE
- 3 LOCAL JOBS FOR LOCAL FOLKS
- 4 MORE EQUALITY
- 5 MORE STABILITY
- 6 By using energy more efficiently we can have jobs and a growing economy while reducing energy production and the pollution that goes with it

NUCLEAR and BIG ENERGY PROJECTS

- 1 FEWER JOBS than the same money gets tied up in big energy projects
- 2 JOBS FOR HIGHLY TRAINED SCIENTISTS AND TECHNICIANS
- 3 JOBS FOR AN ELITE CORPS OF TRANSIENT WORKERS
- 4 A few highly paid jobs and a lot of unemployment
- 5 Short term construction jobs which build a boom and bust cycle
- 6 Risky investments in big energy projects which could hurt the economy if they fail





A BRIEF HISTORY of the RAKER ACT

OR HOW A PRIVATE CORPORATION COULD "HETCH HETCHY" THE CITIZENS OF SAN FRANCISCO

REFORM MAJOR JAMES D. PHELAN PUSHES FOR PUBLIC OWNERSHIP OF UTILITIES

"THE SEE-SAW OF CORRUPTION DO LONG AS PUBLIC UTILITIES ARE IN THE HANDS OF PRIVATE OWNERS!"



IN 1913 CONGRESS PASSES THE RAKER ACT GRANTING WATER & POWER RIGHTS TO SAN FRANCISCO

"THE RIGHTS HEREBY GRANTED SHALL NOT BE SOLD, ASSIGNED OR TRANSFERRED TO ANY PRIVATE PERSON OR CORPORATION, OR ASSIGN, ASSIGN, IN CASE OF ANY ATTEMPT TO SELL, ASSIGN, TRANSFER OR CONVEY THIS GRANT SHALL REVERT TO THE GOVERNMENT OF THE UNITED STATES"



THE PROPOSED SITE FOR A DAM WAS THE BEAUTIFUL HETCH HETCHY VALLEY IN YOSEMITE NATIONAL PARK



"WONDERFULLY EXACT COUNTERPART OF THE MERGED YOSEMITE 'SUBLIME ROCKS AND WATERFALLS'." - JOHN MAUIR

MAUIR AND OTHERS WERE BITTERLY UNHAPPY AT THE PASSAGE OF THE RAKER ACT AND THE LOSS OF HETCH HETCHY, BUT OTHER CONSERVATIONISTS CONSIDERED IT A GOOD COMPROMISE

"IT'S IN THE PUBLIC INTEREST AND VIRTUALLY IMPERVIOUS TO SUBVERSION BY PRIVATE POWER UTILITIES."



SENATOR GEORGE NORRIS (NEBRASKA)

IN 1923 SAN FRANCISCO PURCHASED ENOUGH COPPER TRANSMISSION CABLE TO REACH FROM HETCH HETCHY TO SAN FRANCISCO



WORK HAD BEGUN ON THE DAM

HAND DROPPED BY

R. L. RIPPET MTR SAN FRANCISCO (1913)

CONGRESS WAS RELUCTANT ABOUT GRANTING HETCH HETCHY TO S.F. BECAUSE OF THE OPPOSITION FROM JOHN MAUIR AND OTHER SINCERE CONSERVATIONISTS

"DAM HETCH HETCHY'S WELL DAM FOR WATER DRINKS THE PEOPLES CATHEDRALS AND CHURCHES; FOR NO HOLIER TEMPLE HAS EVER BEEN CONSECRATED TO THE HEART OF MAN!"



THE POWERHOUSE AT MOLASSIN CREEK WAS COMPLETED BY 1925 AND THE TRANSMISSION LINES WERE STRUNG 99 MILES, AS FAR AS NEWARK, CALIFORNIA. THEN WORD CAME FROM CITY HALL THAT FUNDS FOR THE PROJECT WERE EXHAUSTED



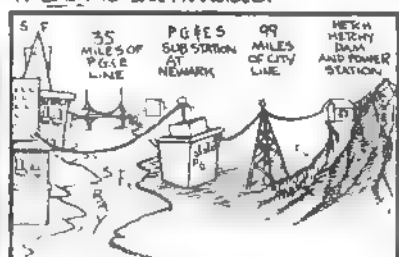
"CONVENIENTLY" P.G. & E. HAD A SUB-STATION IN NEWARK AND HAD JUST LAID A TRANS-BAY HIGH VOLTAGE CABLE TO SPAN THE 35 MILES TO SAN FRANCISCO.



WHEN P.G. & E. AND GREAT WESTERN REFUSED TO SELL THEIR SYSTEMS TO THE CITY THE BOARD OF SUPERVISORS DIDN'T USE EMINENT DOMAIN TO ACQUIRE THEM BUT INSTEAD APPROVED A CONTRACT ON JULY, 1925 TO HAND OVER HETCH HETCHY POWER AT NEWARK



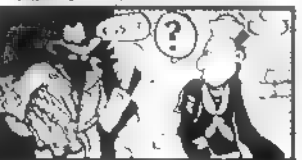
SO, P.G. & E. GETS THE CITY POWER CHEAP AT NEWARK, THEN RAISES THE PRICE AND SELLS IT BACK TO SAN FRANCISCO.



SECRETARY OF INTERIOR, HAROLD ICKES TOOK OFFICE IN 1933 AND BEGAN TO LOOK INTO THE 1925 CONTRACT



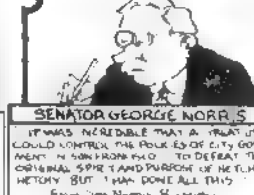
IN 1935, SAN FRANCISCO QUIETLY SELLS THE UNUSED TRANSMISSION CABLE FOR SCRAP



SO EVERYBODY LOST THE HETCH HETCHY VALLEY WAS SACRIFICED FOR CHEAP PUBLIC OWNED UTILITIES WHICH THE PUBLIC NEVER GOT

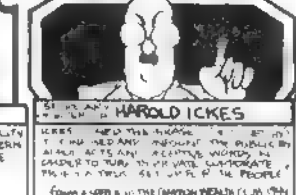


JOHN MAUIR LEADERSHIP IN THE HETCH HETCHY VALLEY WAS SACRIFICED FOR CHEAP PUBLIC OWNED UTILITIES WHICH THE PUBLIC NEVER GOT

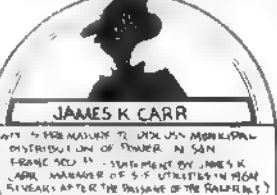


SENATOR GEORGE NORRIS

THE LEGAL BATTLE RAGED ON FOR 10 YEARS, GOING ALL THE WAY TO THE SUPREME COURT. COMPROMISES WERE REACHED AND OFFICIALS SOUGHT WAYS TO DISPOSE OF THE HETCH HETCHY POWER THAT WOULDN'T SEEM AN OVERT SALE TO P.G. & E. AFTER ICKES LEFT OFFICE IN 1946 THE DEPARTMENT OF INTERIOR BECAME LAX IN TRYING TO ENFORCE THE RAKER ACT



HAROLD ICKES



JAMES K. CARR

1973 SAN FRANCISCO GRAND JURY INVESTIGATED THE HETCH HETCHY SCANDAL AND DECLARED THE CITY WAS NOT LIVING UP TO THE RAKER ACT AND THAT CONTRACTS WITH P.G. & E. WERE OF QUESTIONABLE LEGALITY. THE GRAND JURY REQUESTED THE BOARD OF SUPERVISORS TO HOLD PUBLIC HEARINGS (WHICH THEY MANAGED TO SQUIRM OUT OF) AND SO IT GOES.....

...AND LISTEN KIDS, YOU
MUST MAKE THEM REALIZE...
**DINOSAURS AREN'T
DYING ANYMORE!**

YES
MA...

COPYRIGHT 1978 BY R. DICES

WE WILL
DO OUR
BEST!

YOU BET. WHERE
ARE THEY? DO YOU
SEE WHAT
WE HAVE
COME FOR?

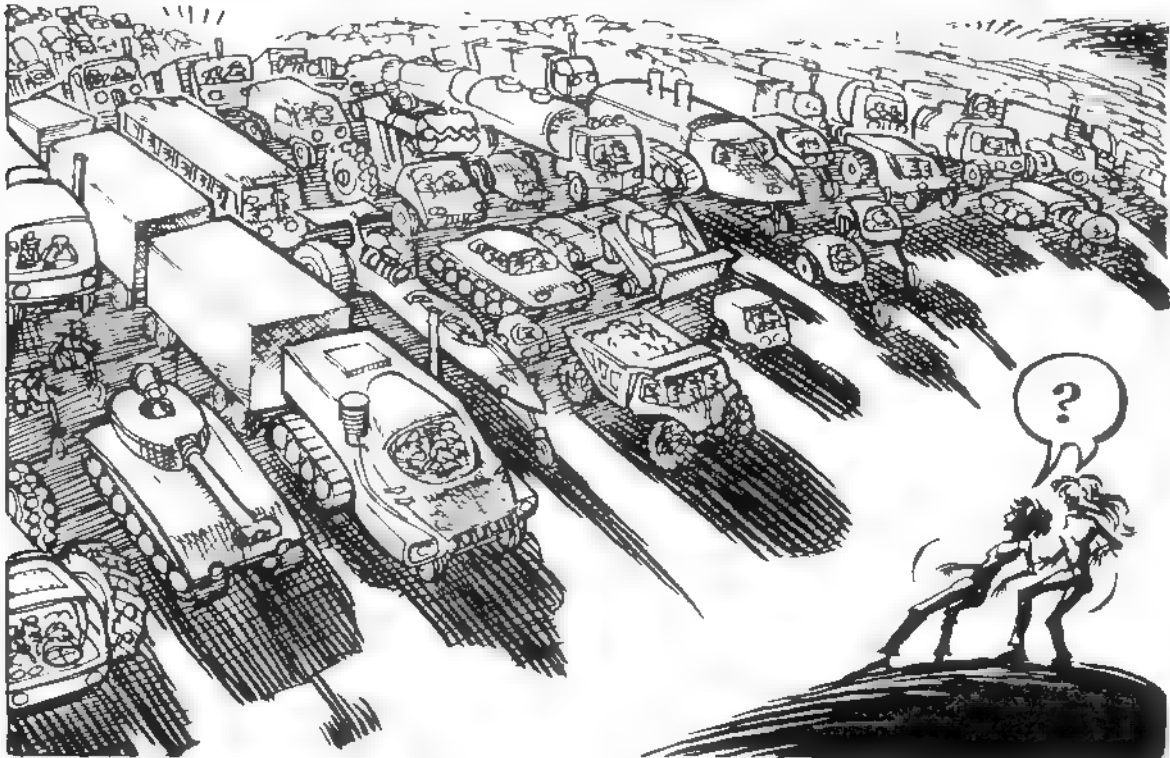
YES!
LOOK. FLAME
ABOVE THE
EASTERN,
HORIZON.

HOLY MOTHER
OF MADNESS.
WHAT DO WE
DO NOW?

NOW DON'T FRET
WE'RE NOT EXACTLY
HELPLESS YOU KNOW
MOTHER NATURE
IS ON OUR SIDE!

OH SURE!
YOU KNOW THAT,
BUT DOES THAT
KNOW THAT?

INDUSTRIALIZATION PLUS EXPONENTIAL GROWTH!



EXPONENTIAL GROWTH, YOU SAY?

IT'S LIKE COMPOUND INTEREST...THAT MEANS IT DOUBLES EVERY 10 YEARS OR SO!

YOU MEAN THIS WHOLE THING WILL BE TWO TIMES BIGGER.!?

YES, AND THEN 4 TIMES BIGGER, THEN 8 TIMES BIGGER, THEN 16 TIMES

MAYBE IF WE CAN STOP THEM! PERHAPS EXPLAIN THAT...

YEARS LEFT FOR NON-RENEWABLE RESOURCES

TIN 18
IRON 93
COAL 117
COPPER ... 21
OIL 30

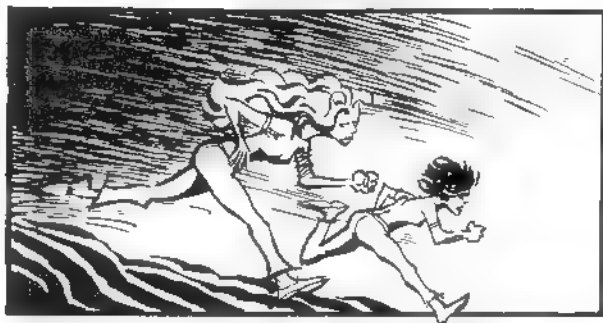
MOTHER SIMPLY HASN'T GOT THE PARTS!

AND YOU! YOU'RE GOOD WITH WORDS! I'LL GET THEIR ATTENTION...

WHY NOT? WE HAVE TO START SOMEWHERE

AND YOU EXPLAIN THINGS!

IN SWIFT PRECISION, MOTHER'S TWO SEASONED VETERANS SWEEP INTO ACTION!



LOOK MAC! TWO CHICKS!

OH YEAH?

STOP!

ROAR

IMAGINE THAT!

CRUNCH THUMP

THANK MOM, THE TRUTH IS INDESTRUCTIBLE!

OH

...AND IN THE FACE OF PROGRESS...A NATURAL EVENT!



OUR ENERGY!

WHERE HAS ALL MY POWER GONE?

THERE'S NO FUEL FOOL!

WHAT'S HAPNIN' BABY?

SORRY, DEAR WE'RE OUT OF GAS

WHAT?

NO OIL EITHER

NOT A DAMN THING!

LOOK! IT'S DEM BROADS AGAIN!

WAIT! WHAT ARE THEY SAYING?

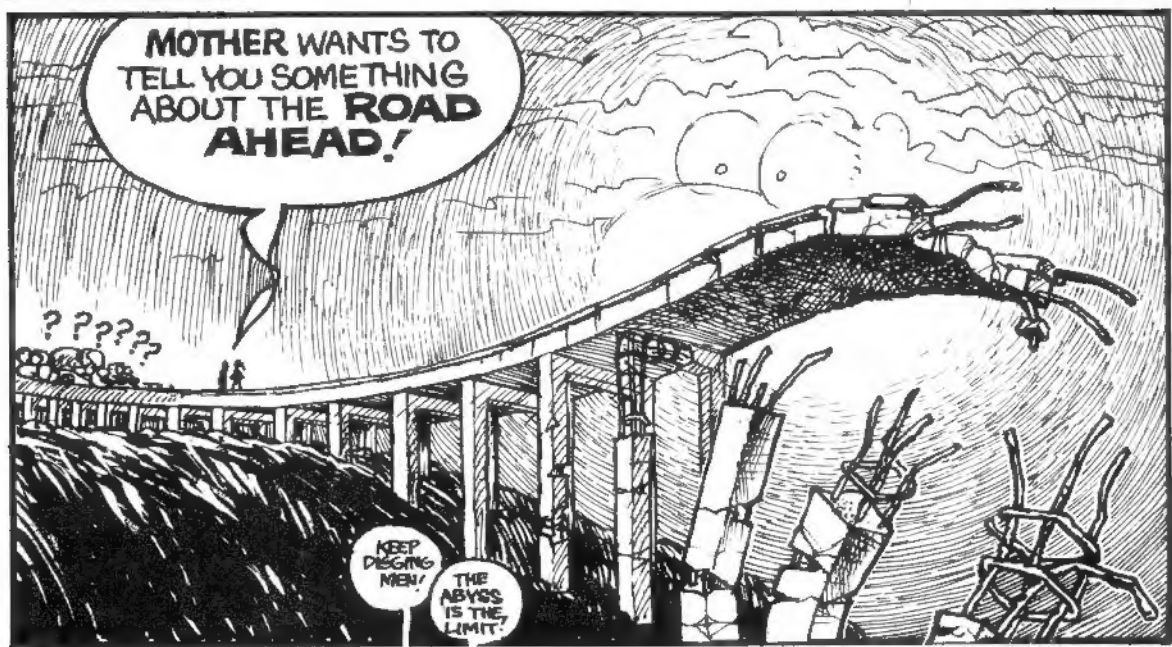
LISTEN

WE ARE YOUR FRIENDS AND HAVE BEEN SENT HERE WITH A MESSAGE...

MOTHER WANTS TO TELL YOU SOMETHING ABOUT THE **ROAD AHEAD!**

KEEP DIGGING MEN!

THE ABYSS IS THE LIMIT!



Bibliography

Hard vs. Soft

Sources are *Soft Energy Paths*, Amory Lovins (1977), copublished by Friends of the Earth and Balingier; "A Neo Capitalist Manifesto", Amory Lovins, *Politics* magazine, April 11, 1978; *Alternative Long-Range Energy Strategies*, a fat government document which Hugh Nash has edited and Friends of the Earth has published as *The Energy Controversy: Soft Path Questions and Answers by Amory Lovins and his Critics*, (1979).

The International Project for Soft Energy Paths (IPSEP) publishes a newsletter, "Soft Energy Notes". They're at 124 Spear Street, San Francisco, California, 94105, USA. Friends of the Earth publishes a semi-monthly environmentalist newsletter, "Not Man Apart", also available from 124 Spear Street (\$15/year).

Ang Plantang Nuklear

For the complete scoop see *500 Mile Island: The Philippine Nuclear Reactor Deal*. It's available for \$1.50US plus 53 cents postage from Nautilus, 2729 Derby Street, Berkeley, California, 94705, USA.

The Campaign for a Nuclear Free Philippines is at 3508 Lowell Street NW, Washington DC, 20016, (202) 363-0643. Additional useful contacts are listed in *500 Mile Island*.

Nuklear Komiks

This summary was written by Leonard Rifas. Many thanks to the fine people who translated this comic book for him.

Paha Sapa

Sources for information about the conflict between Native Americans and energy corporations include... *Wasi'chu: The Continuing Indian Wars*, by Bruce Johansen and Roberto Maestas, published in 1979 by Monthly Review Press.

Native Americans and Energy Development, by Joseph Jorgensen et al., published in 1978 by the Anthropology Resource Center (box 90, Cambridge, Mass., 02138, USA).

The Vanishing White Man, by Stan Steiner, Harper Colophon Books, 1976

and "Akwasasne Notes", (subscribe by making a donation. They're at Mohawk Nation, via Rooseveltown, New York, 13683, USA).

The Black Hills Alliance has been publishing "Black Hills/ Paha Sapa Report", the best source for information about the struggle over the Black Hills. To contribute money or energy to the Black Hills Alliance write to them at box 2508, Rapid City, South Dakota, 57701, USA.

I hope you read this in time to attend the "1980 International Gathering for Survival", which is planned to convene in the Black Hills in July, 1980. The purpose of the gathering is to assess the threats to human and earth survival in the 1980's, and how these threats can be dealt with by local communities. Three major events planned are an Appropriate Technology/ Alternative Energy Fair, a Citizens' Review of Corporate Practices (testimony and documentation... do local research and come prepared!), and a Forum for Traditional Native Governments (to offer their views on what steps need to be taken to insure survival). To participate in this gathering write to the Black Hills Alliance c/o Mark Tilsen.

Wood

Thanks to Bill Gregersen, sales manager of Kickapoo Stove Works, La Farge, Wisconsin, 54639, USA, for editorial assistance. He recommends Jay Sheldon's books *Wood Heat Safety* and *The Woodburners' Encyclopedia*.

Jobs and Energy

Energy, Jobs, and the Economy, by Richard Grossman and Gail Daneker, Alyson Publications, Inc., Boston 1979

Jobs from the Sun, California Public Policy Center, Los Angeles, 1978

Creating Solar Jobs, Mid-Peninsula Peace Conversion Project, Mountain View, California, 1978

The folks who are best informed on this issue are the Environmentalists for Full Employment. They are at 1536 - 16th Street NW, first floor, Washington D.C., 20036, USA.

The Raker Act

The best source on this is the San Francisco Bay Guardian. See "Hoe PGE Swindles SF", "How to Hetch Hetchy", 3-27-69; "PGE, a Chronology", 7-5-72; "PGE House Attorney in City Hall", Oct. 5-18, 1974; "PGE Chronicler", April 13-26, 1974; "How to Hetch Hetchy the City Charter" 9-30-69; "Bucking the Biggest Scandal of All", April 20-28, 1978; and "Drain Hetch Hetchy", City Magazine, 11-11-75.

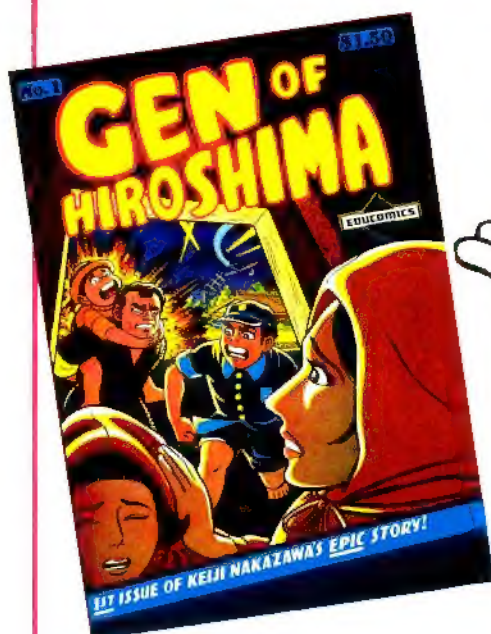
Dinosaurs Aren't Dying Anymore

Boyle, Godfrey and Harper, Peter ed. *Radical Technology*, 1976, Wildwood House, London

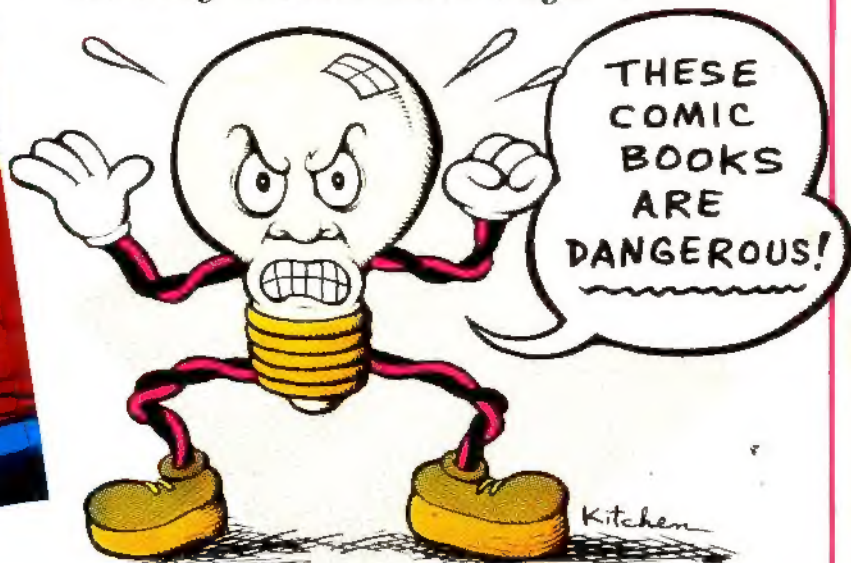
Clark, Wilson, *Energy for Survival*, 1974, Anchor Press, New York

Schumacher, E.F., *Small is Beautiful*, 1973, Harper and Row, New York

If you would like to distribute this comic book you can get copies from EDUCOMICS, box 40246, San Francisco, California, 94140, USA. 10-49 copies are 75 cents each, 50-99 are 62½ cents, 100 on up are 50 cents. Please add 10% to help defray postage and handling and another 6% if you're Californian.



Greedy Killerwatt says...



NUCLEAR COMICS

1. **ALL-ATOMIC COMICS (5th printing)**--- An introduction to nuclear power problems and dangers, by Leonard Rifas (editor of *Energy Comics*). \$1.25
 2. **SLOW DEATH No.9**---The anti-nuclear issue of Last Gasp's ecology comix series. \$1
 3. **ATOMIC HORROR COMICS**--- An anti-uranium mining comic book from Australia. \$1
 4. **NUCLEAR DRAGONS ATTACK**--- An anti-uranium mining comic from Canada. 75c
 5. **THE ANTI-NUCLEAR HANDBOOK**--- An anti-nuclear comic book originally published in Sweden. \$2.95
 6. **GEN OF HIROSHIMA**--- An anti-war, anti-nuclear weapons comic book by a survivor of the Hiroshima bombing, originally published in Japan. 48 pages. \$1.50
 7. **BAREFOOT GEN, Volume II**--- A Japanese comic book about the aftermath of the Hiroshima bombing. Squareback. \$4.00
-
8. **CORPORATE CRIME COMICS No.1**---The Karen Silkwood case & other stories. \$1
 9. **CORPORATE CRIME COMICS No.2**---Westinghouse exports nuclear dangers to the Philippines. Plus other stories by top cartoonists. \$1
 10. **NUCLEAR AMERICA MAP**--- U.S. nuclear facilities & atomic target areas. 75 cents

other comic books available...

11. **MAMA! DRAMAS**--- Comic written and drawn by mothers about motherhood. \$1
12. **NET PROFIT**--- Porpoises & the tuna industry. 75 cents
13. **AN ARMY OF PRINCIPLES**---History & philosophy of the American Revolution. 75c
14. **CONSUMER COMIX**---Tactics that some devious businesses use to rip-off consumers. \$1
15. **NUCLEAR SAMPLE PACK**---All of the nuclear comics listed above, plus Corporate Crime No.1 & 2, and the Nuclear America Map---all for \$15 postpaid.

If you don't want to cut your comic, list books on separate sheet.

Mail to: **EDUCOMICS, P.O. Box 40246,**
San Francisco, California 94140 U.S.A.

E-1

☐ Enclosed is my check or money order for _____
 Please send me the items circled below:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

☐ I am interested in obtaining some of your comic books in bulk quantities. Please send me information on your wholesale discounts.

Name _____

Address _____

City _____ State _____ Zip _____

Note: Please add 10% to help defray the cost of postage and handling. California residents must include 6% sales tax.



Sir Real's

**UNDERGROUND
COMIX CLASSIX**

Energy Comics #1

Published January 1980

(1st edition)

Educomics

\$1.25

36 pages

Print run of 10,000 copies

7" x 10 1/4"

ISBN:

Stories:

- 2 - Introduction
- 3 - Hard vs. Soft
- 10 - Eco-Correcto
- 12 - Ang Plantang Nuklear
- 14 - The Wind
- 15 - Mr. Appropriate
- 18 - Pie In The Sky
- 20 - Paha-Sapa, The Black Hills
- 24 - Wood Heat
- 26 - Jobs and Energy
- 30 - A Brief History of the Baker Act
- 31 - Dinosaurs Aren't Dying Anymore
- 35 - Bibliography
- 36 - Nuclear Comics (ad)

Artists:

Leonard Rifas (editor) - 2(e), 3-9, 20-23(s,p), 25-29

Denis Kitchen - 1, 36(ad)

Joyce Farmer - 10-11

Lyuba Zarsky - 12-13(t)

Greg Irons - 14

Robert Crumb - 15-17

Sharon Kahn Rudahl - 18-19

Rinaldo Iturrino - 20-23(l)

Moria Wright - 24-25?

Larry Rippee - 30

Harry Driggs (= "R. Diggs") - 31-34

Comments:

Dangers and opportunities of energy choices.